

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matters of)
)
EchoStar Satellite Operating Corporation) File Nos. SAT-MOD-20130227-00026
) SAT-AMD-20130429-00063
Application for Modification of License for the EchoStar) SAT-AMD-20130613-00083
6 Satellite to Specify the 96.2° W.L. Orbital Location) Call Sign: S2232
)
)
EchoStar Satellite Operating Corporation) File Nos. SAT-STA-20130510-00067
) SAT-STA-20130716-00093
) SAT-STA-20130912-00115
) SAT-STA-20131113-00131
) SAT-STA-20140113-00004
) SAT-STA-20140314-00031
Applications to Extend Special Temporary Authority to) SAT-STA-20140513-00050
Operate the EchoStar 6 Satellite at the 96.2° W.L.) SAT-STA-20140711-00085
Orbital Location) Call Sign: S2232
)
)
EchoStar Satellite Operating Corporation) File Nos. SES-MFS-20130307-00232 to 234
) SES-STA-20130510-00382 to 384
) SES-STA-20130716-00634 to 636
) SES-STA-20130912-00797 to 799
) SES-STA-20131113-00970 to 971
) SES-STA-20131113-00977
) SES-STA-20140113-00018 to 20
Applications for Modification of Licenses and Special) SES-STA-20140314-00141 to 143
Temporary Authority for Earth Stations Supporting) SES-STA-20140513-00345 to 347
EchoStar 6 Satellite Operations at the 96.2° W.L. Orbital) SES-STA-20140711-00595 to 597
Location) Call Signs: E020306; E070273; E080120

ORDER AND AUTHORIZATION

Adopted: August 11, 2014

Released: August 11, 2014

By the Chiefs, International Bureau and Office of Engineering and Technology:

I. INTRODUCTION

1. With this Order, we grant the request of EchoStar Satellite Operating Corporation (ESOC) for modification of its license for the EchoStar 6 satellite, to specify the 96.2° W.L. orbital

location,¹ and to operate at 96.2° W.L. using the 12.2-12.7 GHz (space-to-Earth) and 17.3-17.8 GHz (Earth-to-space) frequency bands. We also grant related applications for modification of three of ESOC's licenses for earth stations used for technical support of EchoStar 6 operations. As part of this action, we dismiss petitions to deny filed by Spectrum Five, LLC (Spectrum Five). We also act on numerous related requests for special temporary authority filed in connection with EchoStar 6 operations. We conclude that grant of the requested license modifications will serve the public interest by facilitating possible development of new services to the Atlantic Ocean region.

II. BACKGROUND

2. We previously authorized, on April 1, 2013, operations necessary for ESOC to move the EchoStar 6 satellite to the 96.2° W.L. orbital location, as well as operations at the new location, under special temporary authorization (STA).² ESOC filed that request on February 20, 2013.³ In its request, ESOC indicated it was seeking to accommodate the needs of its customer and development partner, SES Satellites (Bermuda) Ltd. (SES Bermuda), which has been authorized by Bermuda to operate a satellite network at 96.2° W.L. pursuant to the United Kingdom (U.K.) filing with the International Telecommunication Union (ITU) known as BERMUDASAT-1.

3. ESOC filed the modification application on February 27, 2013,⁴ and amended it on April 29, 2013.⁵ The application was placed on public notice on May 3, 2013.⁶ Spectrum Five filed a petition to deny the application on June 3, 2013 ("Spectrum Five Petition to Deny"). ESOC opposed the petition to deny on June 13, 2013, and Spectrum Five replied to that opposition on June 20, 2013.

4. ESOC subsequently amended its application regarding technical information related to signal polarization.⁷ That amendment was placed on public notice on October 25, 2013.⁸ On November 25, 2013, Spectrum Five filed a supplement to its petition to deny. ESOC filed a motion to strike the supplement on December 9, 2013, and Spectrum Five opposed that motion on December 19, 2013.

5. On January 3, 2014, ESOC filed a letter disclosing information concerning location of the EchoStar 6 satellite during the period from April 13 to December 2013 ("ESOC Station-keeping Disclosure").⁹ On March 6, 2014, ESOC submitted a letter to which it attached a decision of the ITU Radiocommunication Bureau concerning the U.K.'s BERMUDASAT-1 filing.

¹ Prior to today's action, EchoStar 6 was licensed by the Commission for regular operations at the 61.65° W.L. orbital location. See IBFS File No. SAT-MOD-20100720-00164.

² EchoStar Satellite Operating Company, *Order and Authorization*, 28 FCC Rcd 4229 (Int'l. Bur 2013) (*STA Grant*), *stay denied*, 28 FCC Rcd 5475 (Int'l. Bur 2013) (*Stay Denial*), *review denied*, 28 FCC Rcd 10412 (2013) (*STA Affirmance*), *appeal dismissed*, *Spectrum Five LLC v. FCC*, Nos. 13-1231&13-1232 (D.C. Cir. July 11, 2014). The International Bureau also granted companion STAs for related earth station operations. See File Nos. SES-STA-20130222-00206 to -00208.

³ IBFS File No. SAT-STA-20130220-00023.

⁴ IBFS File No. SAT-MOD-20130227-00026.

⁵ IBFS File No. SAT-AMD-20130429-00063.

⁶ Report No. SAT-00946 (May 3, 2013).

⁷ See File No. SAT-AMD-20130613-00083.

⁸ Report No. SAT-00975 (October 25, 2013).

⁹ Portions of the material were submitted subject to a request for confidential treatment.

6. The initial STA grant was for a period of sixty days, commencing April 1, 2013. While the modification application has remained pending, ESOC has filed periodic requests for renewal of its STA. On May 22, 2013, Spectrum Five petitioned to deny the initial May 10, 2013 request for renewal. On June 3, 2013, ESOC opposed that petition, and on June 10, Spectrum Five replied. On July 8, 2013, Spectrum Five supplemented that petition to deny and submitted information concerning EchoStar 6 station-keeping. ESOC responded, and the parties filed a number of additional pleadings concerning the matter. On February 11, 2014, Spectrum Five filed an opposition to ESOC's January 13 periodic request to renew the STA, and opposed the grant of any of the renewal requests. ESOC replied on February 26, 2014, and Spectrum Five filed a further reply on March 11, 2014. ESOC submitted an additional pleading on March 31, 2014. The Government of Bermuda, through the Ministry of Education and Economic Development, filed a letter concerning the status of Bermuda's authorization process related to the BERMUDASAT-1 filing, on April 1, 2014. On April 14, 2014, Spectrum Five filed an opposition to ESOC's March 14 STA renewal request.¹⁰ ESOC responded on April 29. Spectrum Five filed a further opposition on June 9, 2014. ESOC responded on June 18, 2014. Spectrum Five filed a supplemental opposition on July 15, 2014, to which ESOC responded on July 30, 2014.

III. DISCUSSION

7. The Commission previously concluded that operations of the EchoStar 6 satellite under STA at the 96.2° W.L. orbital location would serve the public interest. For the reasons articulated in the *STA Affirmance*, we conclude that grant of regular authority for such operations is warranted. In reaching this conclusion, we have examined the various objections raised by Spectrum Five. Many of those objections repeat objections or seek to re-argue matters raised and ruled on in connection with the initial STA grant. Spectrum Five argues that: 1) grant of the application will negatively impact competition by negatively impacting its business plans to obtain future access to the U.S. market for a satellite operating under a Netherlands ITU filing,¹¹ and 2) authorization of EchoStar 6 operations on a non-interference basis under Article 4.4 of the ITU Radio Regulations¹² is inconsistent with international law, because such operations are not permitted under the ITU Appendix 30/30A BSS/Feeder Link Plans.¹³ Because the

¹⁰ See File No. SAT-STA-20140314-00031.

¹¹ Spectrum Five Petition to Deny at 14-18. See *STA Grant*, 28 FCC Rcd at 4232-33, ¶¶ 11-12 (discussing DBS freeze), *STA Affirmance*, 28 FCC Rcd at 10419, ¶ 17 (harms to competition “speculative and based on unsupported assumptions”).

¹² Article 4.4 provides:

Administrations of the Member States shall not assign to a station any frequency in derogation of either the Table of Frequency Allocations in this Chapter or the other provisions of these Regulations, except on the express condition that such a station, when using such a frequency assignment, shall not cause harmful interference to, and shall not claim protection from harmful interference caused by, a station operating in accordance with the provisions of the Constitution, the Convention and these Regulations.

¹³ Spectrum Five Petition to Deny at 18-20. See *STA Grant*, 28 FCC Rcd at 4235, ¶ 17, *STA Affirmance*, 28 FCC Rcd at 10415, ¶ 8. The Spectrum Five Petition to Deny continues to attempt to construct a violation of international law based on statements of a distinguished ITU Radiocommunication Bureau official concerning the topic of “recording of an assignment” under the ITU Radio Regulations, while disregarding that official's concurrent statement that “the national authorization to operate a satellite network under No. 4.4 . . . is the prerogative of the administration and beyond the responsibility of the Bureau.” Spectrum Five Petition to Deny, Exhibit 3, at 4, ¶ 1. The United States is not required to seek and is not seeking recording of an assignment in connection with the operations authorized in this order. We therefore continue to find that the statement of the ITU Radiocommunication Bureau official concerning recording of an assignment is not relevant to our actions here.

Commission addressed those arguments in the *STA Affirmance*, we will not address them further, except as noted below. We do, however, address several other matters raised by Spectrum Five.

8. *Allegations of Insufficient Technical Information/Violations of Technical Rules.*

Spectrum Five alleges that the application should be dismissed or denied based on Commission rules concerning Direct Broadcast Satellite (DBS)¹⁴ operations and the consistency of those operations with the ITU Appendix 30/30A Plans.¹⁵ This case is the first one in which we have been asked to interpret these rules in the context of a cooperative effort between operators in which a U.S. satellite is used to support operations under a BSS filing of another administration. As the Commission indicated in the *STA Affirmance*, from the FCC's perspective as the licensing administration of EchoStar 6, the operations are Fixed Satellite Service (FSS) and Mobile Satellite Service (MSS) operations on a non-interference basis,¹⁶ and the FCC has not and does not plan to file a request with the ITU for modification of the Appendices 30 and 30A BSS/Feeder Link Plans. ESOC appropriately provided information to establish that its operations will not cause harmful interference to any operating satellite. Even if we were to apply the requirements of the DBS rules, the application disclosed that the U.K. has submitted a request for modification of the ITU BSS Plan, thus satisfying the prerequisite that is identified in Section 25.148(f) of the rules for any operations with technical characteristics that are not already specified in the Plan, *i.e.*, submitting a request to the ITU for a Plan modification. We also consider the information submitted by ESOC sufficient to meet the requirements of Section 25.114 of our rules under the circumstances. In interpreting the provisions of these rules, the Commission has declined to dismiss or deny applications premised on the alleged "inadequacy" of technical showings when conditioning the grant resolves potential incompatibilities between filed characteristics of a system and the Appendix 30/30A plans.¹⁷

9. Spectrum Five also argues that ESOC must submit a new orbital debris mitigation plan, and raises various concerns about ESOC's ability to comply with a previously approved plan.¹⁸ ESOC has repeatedly affirmed that it is continuing to reserve fuel, consistent with its approved plan, for purposes of post-mission disposal of EchoStar 6.¹⁹ Spectrum Five's allegations rely primarily on satellite lifetime estimates by ESOC made prior to commencement of fuel-saving inclined orbit operations, or on speculation concerning the amount of fuel expended in satellite maneuvers.²⁰ These allegations do not

¹⁴ DBS is the term used in the FCC's Part 25 rules to describe the satellite service known in international nomenclature as the broadcasting-satellite service (BSS). *See* 47 C.F.R. § 25.201 (definition of direct broadcast satellite service), ITU Radio Regulation 1.39 (definition of broadcasting-satellite service). In ITU Region 2, which basically consists of the Western Hemisphere, the 12.2-12.7 GHz (space-to-Earth) and 17.3-17.8 GHz (Earth-to-space) frequency bands are the subject of a plan for BSS and associated feeder link use specified in Appendices 30 and 30A of the Radio Regulations.

¹⁵ Spectrum Five Petition to Deny at 9-10 (citing Sections 25.114(d)(13) and 25.148(f) of the rules). Section 25.114(d)(13) requires that applications for proposed systems in the DBS service with technical characteristics not already specified in the Appendix 30 and 30A BSS and Feeder Link Plans to provide information concerning compatibility with those plans and certain technical limits specified in those plans. Section 25.148(f) requires that "DBS operations must be in accordance with the sharing criteria and technical characteristics contained in Appendices 30 and 30A of the ITU's Radio Regulations. Operation of systems using differing technical characteristics may be permitted, with adequate technical showing, and if a request has been made to the ITU to modify the appropriate Plans to include the system's technical parameters."

¹⁶ 28 FCC Rcd at 10415, ¶ 8. *See also infra*, ¶¶ 17-18.

¹⁷ *See, e.g.*, Spectrum Five LLC, *Order*, 23 FCC Rcd 3252 (2006).

¹⁸ Spectrum Five Petition to Deny at 10-11.

¹⁹ *See, e.g.* ESOC Letter dated February 27, 2013, in File No. SAT-STA-20130220-00023; ESOC Letter dated March 13, 2013, in File No. SAT-STA-20130220-00023, at 5, n.15; ESOC Opposition, filed June 13, 2013, at 9.

²⁰ Spectrum Five Petition to Deny at 10-11.

raise any material question as to the credibility of ESOC's statements concerning its current ability to comply with its approved orbital debris mitigation plan.²¹

10. Spectrum Five also argues that EchoStar 6 operations violate the Commission's requirement for full frequency re-use.²² ESOC's June 13 amendment corrected information concerning polarization to indicate operations in both right and left hand polarization.²³ Accordingly, this issue is moot.

11. Spectrum Five also argues that the ESOC's application should be dismissed because of discrepancies between the "inclination excursion" specified in Schedule S, item S3.f in the application and the actual inclination of the EchoStar 6 satellite. We decline to dismiss or deny the application on this basis. The particular item in Schedule S is not well suited for eliciting information concerning satellites, such as EchoStar 6, that originally operated with north/south station-keeping, but for which such station-keeping has ceased. Schedule S asks for the inclination "excursion," but for such satellites excursion changes continuously due to gravitational and other physical forces. In effect, Spectrum Five asks us to adopt an approach that would require continuous updates to pending applications. We decline to do so. For that reason, if the record indicates that a satellite is in inclined orbit due to cessation of station-keeping, we have previously accepted applications that omit a value for inclination excursion in Schedule S, item S3.f.²⁴ The approach taken by ESOC, specifying excursion in item S3.f. at the time of filing,²⁵ together with a narrative statement stating that the value specified is as of the time of filing, is also a reasonable method for providing information given the constraints of Schedule S, and provides no reasonable basis for dismissal.

12. *Control of EchoStar 6.* Spectrum Five argues that the modification application should be denied because it permits a non-U.S. licensee to control the EchoStar 6 satellite.²⁶ This issue was previously addressed in the *STA Grant*, and, as stated there, "ESOC, as the licensee of the EchoStar 6 satellite . . . is obligated to maintain operational control of EchoStar 6 at all times, and to ensure that operations are under its ultimate direction and control."²⁷ ESOC affirmed that it is complying with this requirement, and provided supporting details concerning its arrangements with SES Bermuda, and the manner in which ESOC has reconciled the requirement to maintain ultimate control with the regulatory obligations its customer, SES Bermuda, has to Bermuda.²⁸ Spectrum Five's allegation concerning control is not supported by the record.

13. *Violation of the DBS Freeze.* In 2005, the Commission adopted a freeze on applications for authority to provide DBS service to the United States using the 12.2-12.7 GHz band and associated

²¹ Any question concerning the adequacy of current fuel levels with respect to the extended license term ESOC requested in IBFS File No. SAT-MOD-20140623-00074 will be addressed in connection with that application.

²² Spectrum Five Petition to Deny at 10 (citing Section 25.210(f) of the rules).

²³ IBFS File No. SAT-AMD-20130613-00083.

²⁴ See, e.g., IBFS File No. SAT-MOD-20130225-00024.

²⁵ ESOC's initial application specified a 0.5 degree inclination excursion in item S3.f., but ESOC corrected this figure by amendment. IBFS File No. SAT-AMD-20130429-00063.

²⁶ Spectrum Five Petition to Deny at 12-13.

²⁷ *STA Grant*, 28 FCC Rcd at 4235, ¶ 18.

²⁸ ESOC June 13 Opposition at 8-9.

feeder links in the 17.3-17.8 GHz band.²⁹ In the *STA Grant*, we concluded that grant of an STA would not violate the freeze, based on ESOC's statement that EchoStar 6 will not provide DBS service in the United States from the 96.2° W.L. orbital location, and the very limited technical operations contemplated under the STA, consisting of feeder links and telemetry, tracking, and command (TT&C).

14. Spectrum Five asserts that grant of ESOC's application for regular authority would violate the freeze because transmissions from EchoStar 6 will reach the United States. The DBS freeze is phrased in terms of applications seeking to provide service, rather than in terms of transmissions. We decline to adopt the substantial expansion of its scope advocated by Spectrum Five.

15. Spectrum Five also asserts that we should construe the freeze broadly to apply to instances in which, by virtue of the Appendix 30/30A BSS and Feeder Link Plan, an FCC action forecloses future entry into the U.S. DBS market. It argues that with the bringing into use of the BERMUDASAT-1 filing, such entry is irrevocably foreclosed because of the need for the Netherlands to seek agreement from the U.K., and the U.K. and its designated operator's consequent right to exercise "unfettered discretion to refuse any requests for such agreement."³⁰ We previously addressed Spectrum Five's concern with foreclosure in the *Stay Denial*, and observed that operations from the 95° W.L. location may already be foreclosed by established Canadian operations.³¹ In any event, denial of ESOC's modification application would not result in removal of the BERMUDASAT-1 entry from the ITU Master Register, as that entry is based on EchoStar 6 operations that have already occurred pursuant to the *STA Grant*.

16. More fundamentally, we do not interpret the *DBS Freeze Order* so broadly as to prohibit any action that could have an indirect effect on the future provision of DBS service. The *DBS Freeze Order* simply froze applications to provide DBS service to the United States using the 12.2-12.7 GHz band and associated feeder links. The limited technical operations at issue here, consisting of feeder links and TT&C conducted using the three earth stations identified in the caption of this Order, do not constitute DBS service and so do not fall within the scope of the freeze. The license modification for EchoStar 6 will be specifically conditioned to require ESOC to limit communications operations in the land area of the United States to communications with three earth stations.

17. *Regulatory Classification of EchoStar 6 FCC Authorization.* In the *STA Affirmance*, the Commission indicated that, from the FCC's perspective as the licensing administration of EchoStar 6, the operations of the satellite authorized are Fixed-Satellite Service and Mobile-Satellite Service operations conducted on a non-interference basis.³² Spectrum Five objects to this approach, arguing that such services are not in conformity with the FCC Table of Allocations, and that ESOC did not request a waiver of that Table. Spectrum Five also argues that satellite operations cannot be both FSS/MSS, as contemplated in the *STA Affirmance*, and BSS, as specified in SES Bermuda's license from the Bermuda regulator.³³ We agree with Spectrum Five concerning conformity with the U.S. Table of Frequency Allocations. In the U.S. Table of Frequency Allocations, the allocation to the FSS in the 12.2-12.7 GHz band is limited to non-geostationary satellites, the allocation to the FSS in the 17.3-17.8 GHz band is

²⁹ Direct Broadcast Satellite (DBS) Service Auction Nullified: Commission Sets Forth Refund Procedures for Auction No. 52 Winning Bidders and Adopts a Freeze on All New DBS Service Applications, *Public Notice*, 20 FCC Rcd 20618 (2005) (*DBS Freeze Order*).

³⁰ Spectrum Five Supplement at 24.

³¹ *Stay Denial*, 28 FCC Rcd at ¶ 15.

³² *STA Affirmance*, 28 FCC Rcd at 10415, ¶ 8.

³³ Spectrum Five November 25, 2013 Supplement to Petition to Deny at 8-10.

limited to feeder links for BSS, and there is no allocation to MSS in the 12.2-12.7 GHz band.³⁴ On our own motion, we waive Section 2.106 of the rules to permit the operations that ESOC requests. We find good cause for waiver based on the public interest benefits of this cooperative international arrangement as discussed in the *STA Grant* and the *STA Affirmance*.³⁵ With respect to MSS, this waiver is limited to reception by earth stations in the 12.2-12.7 GHz band in areas beyond the baseline of the various coastal states and territories of the United States, and does not permit reception of signals within the land area of the United States.³⁶ With respect to Spectrum Five's contention that Bermuda, and, by extension, the United Kingdom, cannot treat EchoStar 6 operations as BSS, we consider it within the discretion of each Administration in managing ITU obligations to determine the ITU frequency allocation for particular operations, bearing in mind the relevant basic technical characteristics of the satellite operations and the ITU definition of the particular allocation category involved.

18. We disagree with Spectrum Five's broader contention that the FCC must categorize the operations authorized by this license as DBS/BSS.³⁷ Again, the technical characteristics of these operations are, from a U.S. perspective, consistent with FSS/MSS operations. Moreover, Spectrum Five's proposed classification would lead to the result of requiring compliance with U.S. DBS regulations, including programming set asides³⁸ and U.S. coverage requirements,³⁹ even though any service that might be considered BSS is provided solely to locations entirely outside the land area of the United States. We decline to take this approach.

19. *East West Station-keeping and Radiated Power Levels.* In response to information submitted by Spectrum Five, ESOC provided additional information indicating that the EchoStar 6 satellite was not maintained to within plus or minus 0.05 degrees of its assigned orbital location during a substantial portion of the period between April 13 and December 2013, and consequently was at times during that period outside the portion of the geostationary arc specified in the *STA Grant*.⁴⁰ Our action here is without prejudice to enforcement action in connection with any violations of the terms of the authorization, or with respect to the timing of disclosure of such matters.⁴¹ Spectrum Five also provided the results of monitoring it performed to measure power levels received from the EchoStar 6 satellite at Woodbine, Maryland. Spectrum Five argues that the measured power levels exceed the levels authorized

³⁴ See 47 C.F.R. § 2.106, n.5.487A; 47 C.F.R. § 2.106, n.US 271.

³⁵ See *STA Affirmance*, 28 FCC Rcd at 10415-10416, ¶ 9; see also *STA Grant*, 28 FCC Rcd at 4235, ¶17 (finding of no harmful interference).

³⁶ In the *STA Grant*, we interpreted the DBS Freeze as not applying beyond the baseline of the various coastal states and territories of the United States. *STA Grant*, 28 FCC Rcd at 4233, ¶12. Spectrum Five also argues that FSS and MSS operations are inconsistent with the ITU Table of Frequency Allocations. Spectrum Five November 25, 2013 Supplement to Petition to Deny at 8. The Commission has repeatedly acknowledged that EchoStar 6's operations as authorized by the U.S. are pursuant to Article 4.4, *i.e.*, "in derogation" of the ITU regulations, and Spectrum Five's argument on this point provides no basis for denial of the application.

³⁷ Spectrum Five November 25, 2013 Supplement to Petition to Deny at 8-10.

³⁸ See 47 C.F.R. § 25.701.

³⁹ See 47 C.F.R. § 25.148(c).

⁴⁰ See ESOC letters dated January 3 and 8, 2014, in IBFS File No. SAT-MOD-20130227-00026. ESOC indicated that an error in one of the parameters entered in flight control software resulted in a systematic deviation from desired operations, but that this error was discovered October 2013 and corrective maneuvers completed by December 2013.

⁴¹ See 47 C.F.R. § 1.65. While enforcement proceedings may be appropriate, we do not consider these matters to rise to the level of seriousness to warrant a finding that ESOC is technically or legally unqualified to hold a Commission license.

in the *STA Grant*. ESOC's response raised questions about Spectrum Five's measurement methods, but did not provide any specific information as to the power levels at which EchoStar 6 has operated and is operating. We are therefore not in a position to definitively address this issue at this time, and instead will address it in the context of ESOC's application for renewal of the license for EchoStar 6,⁴² or in any enforcement action.⁴³ Our action here is without prejudice to any such action. The transmissions authorized by this license modification grant are, as specified in ESOC's application, capped at 49.8 dBW, and may be increased to the extent ESOC has coordinated higher power operations with adjacent satellites, but in no event may exceed 54.7 dBW.

IV. OTHER MATTERS

20. *STA applications.* Following the *STA Grant*, ESOC filed requests to renew the STA at periodic intervals. ESOC's operations at the 96.2° W.L. orbital location are considered continuing operations and to the extent consistent with the terms of the original STA, are considered authorized.⁴⁴ We will list these STAs as granted in the International Bureau Filing System (IBFS) in order to reflect the authorized operations during the pendency of those applications, except for the most recent STA request, which will be listed in IBFS as granted in part for the period ending with the effective date of the license modification.

V. CONCLUSION AND ORDERING CLAUSES

21. Based on the foregoing, we conclude that a grant of this application would serve the public interest.

22. Accordingly, IT IS ORDERED that ESOC's application for license modification, File No. SAT- SAT-MOD-20130227-00026, as amended by File Nos. SAT-AMD-20130429-00063 and SAT-AMD-20130613-00083, IS GRANTED, and ESOC is authorized to operate the EchoStar 6 satellite (Call Sign S2232) in the 12.2-12.7 GHz (space-to-Earth) and 17.3-17.8 GHz (Earth-to-space) frequency bands at the 96.2° W.L. orbital location, with Telemetry, Tracking, and Command using the following center frequencies: 17.305 GHz (Earth to space), and 12.203 GHz and 12.204 GHz (space to Earth). Operations under this authorization must be in accordance with the technical specifications set forth in ESOC's application and the following conditions:

- a. All operations under this authorization are on an unprotected and non-harmful interference basis, *i.e.*, the EchoStar 6 space station shall not cause harmful interference to, and shall not claim protection from interference caused to it by, any other lawfully operating station. In the event of any harmful interference, ESOC shall cease operations immediately upon notification of such interference, and shall inform the Commission, in writing, immediately of such an event.
- b. While at the 96.2° W.L. orbital location, ESOC must maintain the EchoStar 6 spacecraft with an east/west longitudinal station-keeping tolerance of +/- 0.05 degrees.
- c. Operations with earth stations located in the land area of the United States shall be limited to FSS uplink and Telemetry, Tracking, and Command operations using three stations.

⁴² See IBFS File No. SAT-MOD-20140623-00074. Spectrum Five also opposed grant of this application.

⁴³ Even if ESOC has operated EchoStar 6 at unauthorized power levels, such a violation would not rise to the level of seriousness to warrant a finding that ESOC is technically or legally unqualified to hold a Commission license. Accordingly, this matter can be appropriately addressed in further proceedings.

⁴⁴ See 47 C.F.R. § 1.62; 5 U.S.C. § 558(c).

23. IT IS FURTHER ORDERED that, Section 2.106 of the Commission's rules, 47 C.F.R. § 2.106, is waived, pursuant to Section 1.3 of the Commission's rules, 47 C.F.R. § 1.3, to permit operations as described in paragraph 17 of this Order.

24. IT IS FURTHER ORDERED that ESOC's applications for earth station license modification, File Nos. SES-MFS-20130307-00232 to 234, ARE GRANTED.

25. IT IS FURTHER ORDERED that, to reflect operations pursuant to Section 1.62 of the Commission's rules, 47 C.F.R. § 1.62, File Nos. SAT-STA-20130510-00067, SAT-STA-20130716-00093, SAT-STA-20130912-00115, SAT-STA-20131113-00131, SAT-STA-20140113-00004, SAT-STA-20140314-00031, SAT-STA-20140513-00050, SAT-STA-20140711-00085, SES-STA-20130510-00382 to 384, SES-STA-20130716-00634 to 636, SES-STA-20130912-00797 to 799, SES-STA-20131113-00970 to 971, SES-STA-20131113-00977, SES-STA-20140113-00018 to 20, SES-STA-20140314-00141 to 143, SES-STA-20140513-00345 to 347, and SES-STA-20140711-00595 to 597 SHALL BE LISTED AS GRANTED in the International Bureau Filing System.

26. This Order and Authorization is issued pursuant to Sections 0.241 and 0.261 of the Commission's rules on delegated authority, 47 C.F.R. §§ 0.241, 0.261, and is effective on release.

FEDERAL COMMUNICATIONS COMMISSION

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